## DRAFT PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT FOR COMMERCIAL LAUNCH VEHICLES

**AGENCY:** Federal Aviation Administration (FAA), Associate Administrator for Commercial Space Transportation (AST)

**PUBLIC REVIEW PROCESS:** In accordance with the National Environmental Policy Act (NEPA) the FAA is initiating a 45-day public review and comment period of the Draft Programmatic Environmental Impact Statement for licensing commercial launch vehicles which will begin with Environmental Protection Agency's publication of a Notice of Availability. The 45-day public review period will commence with the publication of a Notice of Availability in the Federal Register.

**ABSTRACT:** The PEIS specifically addresses the environmental impacts of the proposed action of licensing commercial LVs which is also the preferred alternative proposed action. Two other alternatives are also considered in detail. The more environmentally friendly propellant combination alternative is examined whereby AST would emphasize licensing LVs that produce fewer air emissions of concern. The No Action alternative, under which AST would not issue licenses for commercial LV launches, is also considered.

Potential impacts of the proposed action and alternatives were analyzed in three major categories, atmospheric impacts, noise impacts, and other environmental impacts. Potential impacts to the atmosphere from launches were analyzed including such issues as ozone depletion and acid rain formation. Potential noise impacts analyzed from launch activities include the effects of acoustic energy from launches and sonic booms during flight on receptors (e.g., people, wildlife, and structures). Socioeconomic and environmental justice effects were also considered.

Other environmental effects from the proposed action and alternatives were analyzed for generic localized environments, including the climate and atmosphere of the launch site, land resources, water resources, and biological resources. The environmental characteristics of six different ecosystems representing various existing and potential commercial LV launch locations throughout the U.S. and abroad were used to describe the range of potential impacts of commercial space launches. A marine mammals strike probability analysis was also conducted. The PEIS is *not* site-specific; any required site-specific environmental documentation would be developed as needed.

Potential cumulative impacts, including those to the atmosphere and noise, are also addressed in the PEIS. Irreversible and irretrievable commitment of resources, such as consumption of mineral resources, are addressed. Finally, the PEIS recommends a variety of mitigation measures to prevent or reduce environmental effects associated with the proposed action. Individual launch sites monitor water quality, complete archaeological surveys, and survey biological species in the vicinity of the launch area. It is also assumed that all launch sites will comply with permit conditions imposed by various governmental entities. Examples of suggested mitigation measures include: noise control actions, promoting the use of environmentally friendly propellants, engaging in voluntary pollution prevention programs, developing comprehensive environmental management systems, working with stakeholders to select sites that limit impacts to historic and cultural resources, and implementing effective lighting policies to protect wildlife.

**CONTACT INFORMATION:** Questions about the proposed action and the Draft PEIS; or any relevant data and/or comments regarding the potential environmental impacts associated with reentries and reentry sites can be addressed to Mr. Nikos Himaras, Manager, Environmental Program, Office of the Associate Administrator for Commercial Space Transportation, Space System Development Division, Suite 331/AST-100, 800 Independence Avenue SW, Washington, DC 20591; email <a href="mailto:nick.himaras@faa.gov">nick.himaras@faa.gov</a>; or phone (202) 267-7926. Any written comments regarding the PEIS should be sent to the same mailing address.